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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,858	12/22/2001	Bernhard Raaf	112740-344	6325
29177	7590	03/04/2005	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			SAMS, MATTHEW C	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,858

Applicant(s)

RAAF, BERNHARD

Examiner

Matthew C. Sams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to the preliminary amendment filed 10/22/2001 in which claims 1-24 were canceled and accordingly, claims 25-48 are pending for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed on 10/22/2001 has been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 25 and 27-32, 36-37, 40-43 and 47-48 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gilhousen et al. (US-5,603,096 hereafter, Gilhousen).

Regarding claim 25, Gilhousen teaches a method for controlling the transmission power in a radio system by evaluating a signal received by a receiver via the transmission channel, producing power control information as a function of the evaluation, sending the power control information embedded in a time slot structure to the transmitter, and setting the transmission power in the transmitter as a function of the power control information. (Col. 2 line 64 through Col. 3 line 63) Gilhousen teaches a coding in the receiver for power control information in a time slot, with redundancy, with further data to be transmitted in the same one time slot to form a common data word, with at least one bit value in the data word depending on the power control information and on the further data and transmitting the power control information to the transmitter. (Col. 2 line 64 through Col. 3 line 63)

Regarding claim 27, Gilhousen teaches a method of controlling the transmission power in a radio system including further data that is user data. (Col. 5 lines 41-49)

Regarding claim 28, Gilhousen teaches power control information that is transmitted in binary form. (Col. 9 line 16-17)

Regarding claim 29, Gilhousen teaches a method of transmission power control in a radio system where the bits in the power control information are

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coded with bits of the further data to form a common binary data word. (Col. 2 line 64 through Col. 3 line 3)

Regarding claim 30, Gilhousen teaches a method of controlling transmission power in a radio system, wherein the coded data word includes a plurality of a sum of bits in the power control information and the bits in the further data. (Col. 2 lines 17-63)

Regarding claim 31, Gilhousen teaches a method of controlling transmission power in a radio system where during the coding process, at least one bit in the coded data word is assigned a value of the power control information to be transmitted in the corresponding time slot. (Col. 2 line 40 through Col. 3 line 3)

Regarding claim 32, Gilhousen teaches a method of controlling transmission power in a radio system where during the coding process, one bit in the coded data word is assigned a value of the information to be transmitted in the one time slot from the further data. (Col. 3 lines 48-63)

Regarding claim 36, Gilhousen teaches a method of controlling transmission power in a radio system where the receiver is a base station and produces the coded power control information. (Col. 3 lines 48-63) Gilhousen teaches the transmitter which receives the power control information and sets the transmission level appropriately is a mobile station. (Col. 3 lines 48-63)

Regarding claim 37, Gilhousen teaches a radio system that includes control for the transmission power in a radio system by evaluating a signal received by a receiver via the transmission channel, producing power control

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information as a function of the evaluation, sending the power control information embedded in a time slot structure to the transmitter, and setting the transmission power in the transmitter as a function of the power control information. (Col. 2 line 64 through Col. 3 line 63) Gilhousen teaches a coding in the receiver for power control information in a time slot, with redundancy, with further data to be transmitted in the same one time slot to form a common data word, with at least one bit value in the data word depending on the power control information and on the further data and transmitting the power control information to the transmitter. (Col. 2 line 64 through Col. 3 line 63)

Regarding claim 40, the limitations of claim 40 are rejected as the same reason set forth above in claim 28.

Regarding claim 41, the limitations of claim 41 are rejected as the same reason set forth above in claim 29.

Regarding claim 42, the limitations of claim 42 are rejected as the same reason set forth above in claim 31.

Regarding claim 43, the limitations of claim 43 are rejected as the same reason set forth above in claim 32.

Regarding claim 47, Gilhousen teaches a radio system as a CDMA mobile radio system. (Col. 1 58-61)

Regarding claim 48, the limitations of claim 48 are rejected as the same reason set forth above in claim 36.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 26 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen and Takayama et al. (US-5,982,294 hereinafter, Takayama).

Regarding claim 26, Gilhousen teaches a method of controlling transmission power in the radio system as stated in claim 25, but differs from the claimed invention by not showing that further data is format identification information. However, Takayama teaches a communication protocol that includes data for format identification information. (Fig. 4 [401] and Col. 14 lines 23-51) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to incorporate the data format of Takayama into the method of controlling transmission power of the radio system of Gilhousen because transmitting format identification information allows the receiver to recognize the synchronization pattern of the transmitter. (Col. 14 lines 23-49)

Regarding claim 38, the limitations of claim 38 are rejected as the same reason set forth in claim 26.

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Regarding claim 39, Gilhousen teaches a receiver that codes the power control information together with user data for the same time slot. (Col. 2 lines 31-39)

8. Claims 33-35 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen and Raith (US-5,751,731).

Regarding claim 33, Gilhousen teaches a method of controlling transmission power in a radio system as in claim 29, but differs from the claimed invention by not showing that during the coding process, at least one bit in the coded data word is assigned a value which corresponds to a logic operation between the power control information and the further data to be transmitted. However, Raith teaches coding with the logical operation as an exclusive or operation of the codeword with known bits. (Col. 13 lines 25-29) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to incorporate the coding of the logical operation of an exclusive of Raith with the method of controlling transmission power in a radio system of Gilhousen because having the logic operation encoded in a known bit in the codeword simplifies the decoding process because the number of possible decoded values is reduced and then less susceptible to bit errors. (Col. 10 lines 3-33 and Col. 11 line 48 through Col. 12 line 53)

Regarding claim 34, Gilhousen and Raith teach a logic exclusive-or operation as a logic operation. (Gilhousen – Col. 2 lines 17-47 & Raith - Col. 13 lines 25-29)

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Regarding claim 35, Gilhousen teaches a power control bit that is recovered during decoding by the transceiver that has the power control information. (Col. 2 line 64 through Col. 3 line 63)

Regarding claim 44, the limitations of claim 44 are rejected as the same reason set forth above in claim 33.

Regarding claim 45, the limitations of claim 45 are rejected as the same reason set forth above in claim 34.

Regarding claim 46, the limitations of claim 46 are rejected as the same reason set forth above in claim 35.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-6,366,625 to Minami et al. regarding control information assignment in a transmitter and a receiver.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (703)305-0810 and after 3/28/05 at (571)272-7508. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703)305-4708 and after 3/28/05 at (571)272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MCS
3/1/2005


GEORGE ENG
PRIMARY EXAMINER